DETAILED ACTION

A.   This action is in response to the following communications: Amendment filed:

01/15/2010. This action is made **Final**.

B.   Claims 1-29 remain pending.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   This application currently names joint inventors. In considering

patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the

subject matter of the various claims was commonly owned at the time any inventions

covered therein were made absent any evidence to the contrary. Applicant is advised

of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of

each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35

U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3.   Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable

over anticipated Dostie et al. (US Pub 2004/0021691), herein referred to as "Dostie" in

view of Yoshiya Kato et al (US Pat. 6,295,052), herein referred to as "Kato".

As to independent claims 1 and 12, Dostie teaches a device (e.g. method,

device, etc), for inputting, comprising: a display (fig. 1); and a memory (fig. 1)

comprising a first set of characters of a character set (*par.138; default view upon*

system start up is a English character set laid out on a keyboard), said first set of

characters comprising at least two characters (par.138 and 198), and a second set of

characters of said character set (*fig. 3, highlighted characters "TYSD"; par [0080], lines*

12-21; is a separate set of characters), said second set of characters comprising at

least two characters (fig. 3), wherein the characters in the first set of characters are

statistically more likely to be selected in successive order than the characters in the

second set of characters independently of user input (*par.64-65; par.85; in paragraph*

138 it is explained of the English set being displayed with the rapid navigation not

turned on (second set/ highlighted character set)); wherein said display is configured to

selectively display, for selection of which character to input, either the first set of

characters or the second set of characters (*par.249, 252; In one particular example*

relates to figure 29 that feature displaying only one set of characters at a time, set 28c.

Set 28c of figure 29 is displayed and changed to another set of characters when the

user interacts with script-based recognition system 28b. Thus only one set of characters

(first, second, third, etc...) is being displayed at a time for the entry interface of figure 29.

These sets are subsets from a common set and yet are displayed exclusively, thus

Dostie provides that the characters of the first set of characters and the characters of

the second set of characters are mutually exclusive).

Dostie does not specifically teach that upon start up of the interface there is present two

separate sets of alphanumeric characters that only after the user interacts with the

interface that two exist. However in the same field of endeavor Kato teaches that upon

start up of the interface there is present two separate sets of alphanumeric character

(col.27, lines 22-28). Alternatively Katos teaches wherein the alphanumeric characters

of the first set of characters and the alphanumeric characters of the second set of

characters are mutually exclusive (col.27, lines 22-28, 40-43; col.28,lines 1-8, 23-46;

also in another example in figures 25 and 29 which feature different sets of keys being

displayed to the user).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to combine Kato into Dostie. This is true because Kato is a digital keyboard interface

providing the user with a method to efficiently type faster (col.2, lines 4-23). Dostie is

also a digital keyboard interface providing the user with a method to efficiently type

faster. One of ordinary skill in the art would not have been hard pressed to see the

variant option of Kato (showing a distinction between two separate sets of alphanumeric

characters (mutually exclusive), that are produced from different files) to be added to

Dostie to provide a digital keyboard that allows the user to type faster more efficiently.

The end result could be the area 28a of Dostie being replaced by key arrangement

figure 25 of Kato. Kato is concerned with key placement and rearranging the keys of

Dostie would not alter the functionality of system.

As to dependent claims 2, 13 and 22, Dostie teaches the device is adapted to select any desired one of the displayed characters if said desired character exists in the displayed first set of characters (fig. 3).

As to dependent claims 3, 14 and 23, Dostie, it appears that if the desired character is not in the displayed first set, the system would display more of the remaining character for selection (par.64).

As to dependent claims 4, 15 and 24, In light of the rejection set forth in claim 3, user may select any desired one of the displayed characters if said desired character exists in the displayed second set of characters (par.64).

As to dependent claim 5, Dostie teaches the device of claim 1 comprising a character set switch for replacing the currently displayed set of characters with another set of characters (par.80; changing character sets. par.64; changing set of characters on display of graphic keyboard).

As claim to dependents 6, 17 and 25, Dostie does not specifically in detail mention the device is adapted to cluster, on the display for selection, characters within the first set of characters, so that characters that are statistically more likely to be selected in

successive order appear closer to each other than characters that are statistically less

likely to be selected in successive order (par.103; shows how characters are arranged

in a list which represents set of characters from first set of characters).

As to dependent claims 7, 18 and 26, Dostie teaches the device is adapted to display

the characters in the first set of characters on the display in QWERTY-format (fig.3;

par.3).

As to dependent claims 8, 19 and 27, Dostie does not specifically in detail teach the

device is adapted to display the characters in the first set of characters on the display in

alphabetical order (figure 29; list of characters "d,k,n,r,v" are in alphabetical order).

As to dependent claim 9, Dostie further teaches the display is a touch-sensitive display

(par [0079], lines 1-6).

As to dependent claims 10 and 16, Dostie further teaches the first set of characters and

the second set of characters are based on a specific language used for inputting

information (par [0080]).

As to dependent claims 11, 20 and 28, Dostie further teaches the device is embodied as

a mobile terminal for a mobile telecommunications system (par [0073], lines 13-20).

As to independent claim 21 (Current Amended), Dostie teaches a computer program

product comprising program code stored in a memory (fig. 1, label 16, par [0067], lines

6-20) for generating a virtual keyboard on a display (par [0064], lines 15-24), when said

program code is executed by a processor (fig. 1, labels 12, 26; par [0069], lines 1-7) the

program code comprising: for defining a first set of characters of a character set

comprising at least two characters (par.138; default keyboard having English language

character set); for defining a second set of characters of a character set comprising at

least two characters (fig. 3, highlighted characters "TYSD"; par [0080], lines 12-21),

wherein the characters of the first set of characters are statistically more likely to be

selected in successive order than the characters of the second set of characters

independently of user input (par.64-65; par.85; in paragraph 138 it is explained of the

English set being displayed with the rapid navigation not turned on (second set/

highlighted character set); program code for displaying for selection of which character

to input, the first set of characters only on the display (*par.249, 252; In one particular*

example relates to figure 29 that feature displaying only one set of characters at a time,

set 28c. Set 28c of figure 29 is displayed and changed to another set of characters

when the user interacts with script-based recognition system 28b. Thus only one set of

characters (first, second, third, etc...) is being displayed at a time for the entry interface

of figure 29. These sets are subsets from a common set and yet are displayed

exclusively, thus Dostie provides that the characters of the first set of characters and the

characters of the second set of characters are mutually exclusive).

Dostie does not specifically teach that upon start up of the interface there is present two

separate sets of alphanumeric characters that only after the user interacts with the

interface that two exist. However in the same field of endeavor Kato teaches that upon

start up of the interface there is present two separate sets of alphanumeric character

(col.27, lines 22-28). Alternatively Katos teaches wherein the alphanumeric characters

of the first set of characters and the alphanumeric characters of the second set of

characters are mutually exclusive (col.27, lines 22-28, 40-43; col.28,lines 1-8, 23-46;

also in another example in figures 25 and 29 which feature different sets of keys being

displayed to the user).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to combine Kato into Dostie. This is true because Kato is a digital keyboard interface

providing the user with a method to efficiently type faster (col.2, lines 4-23). Dostie is

also a digital keyboard interface providing the user with a method to efficiently type

faster. One of ordinary skill in the art would not have been hard pressed to see the

variant option of Kato (showing a distinction between two separate sets of alphanumeric

characters (mutually exclusive), that are produced from different files) to be added to

Dostie to provide a digital keyboard that allows the user to type faster more efficiently.

The end result could be the area 28a of Dostie being replaced by key arrangement

figure 25 of Kato. Kato is concerned with key placement and rearranging the keys of

Dostie would not alter the functionality of system.

As to independent claim 29, Dostie teaches a device for inputting information

(fig. 1), comprising; means for displaying characters (fig. 1); and means for storing a first

set of characters (fig. 1), said first set of characters of a character set comprising at

least two characters (par.138; default keyboard having English language character set),

and a second set of characters of said character set, said second set of characters

comprising at least two characters (fig. 3, highlighted characters "TYSD"; par [0080],

lines 12-21), wherein the characters in the first set of characters are statistically more

likely to be selected in successive order than the characters in the second set of

characters independently of user input (par.64-65; par.85; in paragraph 138 it is

explained of the English set being displayed with the rapid navigation not turned on

(second set/ highlighted character set); wherein the display is configured to display, for

selection of which character to input, the first set of characters only (*par.249, 252; In*

one particular example relates to figure 29 that feature displaying only one set of

characters at a time, set 28c. Set 28c of figure 29 is displayed and changed to another

set of characters when the user interacts with script-based recognition system 28b.

Thus only one set of characters (first, second, third, etc...) is being displayed at a time

for the entry interface of figure 29. These sets are subsets from a common set and yet

are displayed exclusively, thus Dostie provides that the characters of the first set of

characters and the characters of the second set of characters are mutually exclusive).

Dostie does not specifically teach that upon start up of the interface there is present two

separate sets of alphanumeric characters that only after the user interacts with the

interface that two exist. However in the same field of endeavor Kato teaches that upon

start up of the interface there is present two separate sets of alphanumeric character

(col.27, lines 22-28). Alternatively Katos teaches wherein the alphanumeric characters

of the first set of characters and the alphanumeric characters of the second set of
characters are mutually exclusive (col.27, lines 22-28, 40-43; col.28,lines 1-8, 23-46;
also in another example in figures 25 and 29 which feature different sets of keys being
displayed to the user).

It would have been obvious to one of ordinary skill in the art at the time of the invention
to combine Kato into Dostie. This is true because Kato is a digital keyboard interface
providing the user with a method to efficiently type faster (col.2, lines 4-23). Dostie is
also a digital keyboard interface providing the user with a method to efficiently type
faster. One of ordinary skill in the art would not have been hard pressed to see the
variant option of Kato (showing a distinction between two separate sets of alphanumeric
characters (mutually exclusive), that are produced from different files) to be added to
Dostie to provide a digital keyboard that allows the user to type faster more efficiently.
The end result could be the area 28a of Dostie being replaced by key arrangement
figure 25 of Kato. Kato is concerned with key placement and rearranging the keys of
Dostie would not alter the functionality of system.

**6.   Claims 6, 17 and 25 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Dostie in view Kato in further view of Pu et al. (US Patent
7,152,213), hereinafter "Pu".**

As claim to dependents 6, 17 and 25, Dostie as modified by Kato does not specifically in detail mention the device is adapted to cluster, on the display for selection, characters within the first set of characters, so that characters that are statistically more likely to be selected in successive order appear closer to each other than characters that are statistically less likely to be selected in successive order;

However, in the same field of virtual keyboard input (Pu: col. 10, lines 55-57), Pu teaches the device is adapted to cluster, on the display for selection, characters within the first set of characters, so that characters that are statistically more likely to be selected in successive order appear closer to each other than characters that are statistically less likely to be selected in successive order (col. 4, lines 29-38; col. 2, lines 50-63; fig. 7A- 7C; col. 9, lines 29-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dostie by the device is adapted to cluster, on the display for selection, characters within the first set of characters, so that characters that are statistically more likely to be selected in successive order appear closer to each other than characters that are statistically less likely to be selected in successive order as taught by Pu in order to provide an improved user interface used to input data without the use of a standard keyboard were the data that is entered is selected from a predefined list or group determining by the relative frequency of each valid selection in the predefined list and presenting those valid selections with the highest frequency in a position that minimizes the number keystrokes required for data entry (Pu: col. 2, lines 46-57).

(Note :)   It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments filed 01/15/2010 have been fully considered but they are not persuasive.

A1.   Applicant argues that Dostie nor Kato teaches "wherein said display is configured to selectively display, for selection of which character to input, either the first set of character or the second set of character"; "the characters of the first set of characters and the characters of the second set of characters are mutually exclusive".

R1.   Examiner does not agree, in Dostie there is provided multiple instances of sets of characters, (first, second, third, etc...). In one particular example relates to figure 29 that feature displaying only one set of characters at a time, set 28c. Set 28c of figure 29 is displayed and changed to another set of characters when the user interacts with script-based recognition system 28b. Thus only one set of characters (first, second, third, etc...) is being displayed at a time for the entry interface of figure 29 (par.249, 252). These sets are subsets from a common set and yet are displayed exclusively,

thus Dostie provides that the characters of the first set of characters and the characters

of the second set of characters are mutually exclusive.

Kato teaches multiple sets of characters that can be displayed separately as well.

These character set consist of figures 25-30. Wherein either one set is display or the

other set is displayed (col.26, lines 53-65). As mentioned before one of these sets can

be split into two displayable regions (vowel key area 20A and consonant key area 20B)

that make up individual subsets that are mutually exclusive that is displayed

simultaneously.

Both Dostie and Kato provide efficient evidence that teaches the limitation

"wherein said display is configured to selectively display, for selection of which

character to input, either the first set of character or the second set of character"; "the

characters of the first set of characters and the characters of the second set of

characters are mutually exclusive".

A2.   Applicant argues that if Dostie is combined with Kato that Dostie system

would not work.

R2.   Examiner does not agree, as mentioned above it would have been

obvious to one of ordinary skill in the art at the time of the invention to combine Kato

into Dostie. This is true because Kato is a digital keyboard interface providing the user

with a method to efficiently type faster (col.2, lines 4-23). Dostie is also a digital

keyboard interface providing the user with a method to efficiently type faster. One of

ordinary skill in the art would not have been hard pressed to see the variant option of

Kato (showing a distinction between two separate sets of alphanumeric characters

(mutually exclusive), that are produced from different files) to be added to Dostie to provide a digital keyboard that allows the user to type faster more efficiently. The end result could be the area 28a of Dostie being replaced by key arrangement figure 25 of Kato. Both Dostie and Kato teach a key set area where a user selects from a set of keys. The replacing one set of keys for another would not yield Dostie to not function correctly. Therefore adding the variant key placement of Kato causing a rearranging of the keys from Dostie would not alter the functionality of Dostie's system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-

270-1056 and fax is 571-270-2056. The examiner can normally be reached on Monday

- Friday: 9:30am- 5:00pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Augustine/
Examiner
Art Unit 2179
March 25, 2010

/Ba Huynh/
Primary Examiner, Art Unit 2179